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Water Docket
U.S. Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Draft Total Maximum Daily Load (TMDL) for the Chesapeake Bay

Dear Sir or Madam:

Utility Water Act Group (UWAG)[1] appreciates this opportunity to respond to EPA's request for comment on EPA's draft TMDL for the Chesapeake Bay ("Bay TMDL"). EPA's request was published in the *Federal Register* on September 22, 2010 (75 Fed. Reg. 57,776), and its draft TMDL was released for public review on September 24, 2010 (*see* http://www.epa.gov/chesapeakebaytmdl/).

Some UWAG members operate within the Bay watershed and will be directly impacted by the Bay TMDL, which contains wasteload allocations for point sources that must be implemented through the NPDES permit program. Many other UWAG members will be affected by the precedent set by this TMDL in other impaired watersheds all around the country.

At the outset, UWAG notes the sheer magnitude of the task at hand. The Bay TMDL is the largest and most complex TMDL ever attempted by EPA or a state under the Clean Water Act. UWAG strongly supports the TMDL process as a comprehensive and systematic means of evaluating water quality conditions, exploring the various sources contributing to those

[1] UWAG is a voluntary, ad hoc, non-profit, unincorporated group of 213 energy company systems, which own and operate over fifty percent of the nation's total generating capacity. The Edison Electric Institute, the American Public Power Association, and the National Rural Electric Cooperative Association also are UWAG members.

conditions, and then identifying and selecting solutions that achieve water quality standards in an equitable and cost-effective manner. We stress that equity and cost-effectiveness are especially important in a TMDL for as vast an area as the Bay watershed, which covers 64,000 square miles of the East Coast, stretching from upstate New York to southern Virginia, from the West Virginia panhandle to the Delmarva peninsula.

UWAG supports certain elements of the Bay TMDL, including EPA's approach to air emission sources, hydroelectric dams, and offset for new or expanding dischargers. UWAG also supports EPA's adherence to adaptive management principles, but believes that the Agency needs to take an even more iterative and less rigid approach in order to properly account for the predictive ability and limitations of the models, data, and information underlying the Bay TMDL.

UWAG opposes certain policy predicates in the TMDL, including the Agency's approach to implementation planning, reasonable assurance, and backstop allocations. UWAG also opposes EPA's efforts to force states to adhere to a prescriptive schedule for achieving the reductions set forth in the TMDL.

In addition, UWAG has a number of questions about the Bay TMDL, how it was derived, and how it will be revised in the future. With respect to the TMDL models, in particular, UWAG appreciates EPA's commitment to make further enhancements and corrections in 2011. However, UWAG does not believe that EPA can proceed in the face of modeling errors that compromise the integrity of the modeling projections, especially those that will compel regulatory costs and the threat of fines and penalties for regulated point sources. UWAG urges EPA to be transparent in its final TMDL decision by specifically listing the modeling issues to be addressed, along with their anticipated impacts on the TMDL itself (*e.g.*, on specific wasteload and load allocations, or EPA's assignment of reductions among different sources/sectors).

Some of the comments provided here were previously advanced in connection with EPA's Strategy for Protecting and Restoring the Chesapeake Bay, which was released on November 9, 2009, and finalized on May 12, 2010 ("Bay Strategy").[2] UWAG elected to revive its

[2] This Strategy was prepared pursuant to Section 203 of Executive Order 13508, dated May 12, 2009, and was accompanied by a series of reports, including EPA's so-called Section 202(a) report entitled, *Report on the Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay*. According to EPA, the "Bay TMDL is a keystone commitment in the strategy developed by the federal agencies to meet the President's Executive Order." Bay TMDL at iii.

earlier comments where EPA either failed to respond or failed to meaningfully address UWAG's concerns. UWAG believes that the response to comment process is a fundamental "minimum" in agency decisionmaking, and UWAG urges EPA to provide individualized responses to UWAG's comments before finalizing the Bay TMDL.

1. UWAG supports EPA's approach to air emission sources.

The Bay TMDL air allocation reflects EPA's modeled nitrogen deposition to the Bay, taking into account the reduction in air emissions expected from sources regulated under existing or planned federal Clean Air Act programs. *See* Bay TMDL at 5-20. UWAG strongly supports EPA's inclusion of air deposition within the nonpoint source load allocation, consistent with existing EPA regulations and practice. Without taking a position on the need for air-side reductions, UWAG also strongly supports EPA's decision to defer any such reductions to authorized programs and rulemakings under the federal Clean Air Act.

UWAG is aware that other commenters have asked EPA to more aggressively target air deposition. However, EPA has no authority to do so under the Clean Water Act.

In other TMDL proceedings, UWAG has expressed concern about EPA regions and states attempting to use the Clean Water Act to force air-side reductions. *See*, *e.g.*, UWAG's comments on the Northeast Regional Mercury TMDL. Any such attempt would be unlawful, because the Clean Water Act does not confer any authority on EPA regions or states to regulate air emissions sources. If those sources contribute to a water impairment, then they should, and must, be accounted for as nonpoint sources in the load allocation. But that is where the statutory authority ends. There is no federally enforceable mechanism (other than grant funding) to implement or achieve the load allocation.

2. UWAG supports EPA's approach to hydroelectric dams.

The Bay TMDL acknowledges that "dams along the lower Susquehanna River are a significant factor influencing nitrogen, phosphorus, and sediment loads to the Bay because they retain large quantities of sediment and phosphorus, and some nitrogen, in their reservoirs." *See* Bay TMDL at 10-7. UWAG believes that it is appropriate for EPA to identify the benefits of these dams on downstream water quality.

UWAG is aware that other commenters have asked EPA to manage these dams through the TMDL. The dams are not sources of continuing load or loading to the Bay watershed. Rather, the dams have the effect of controlling or reducing upstream load or loading. Some commenters have posited that failure of the dams would result in catastrophic downstream

impacts and, for this reason, the dams should be subject to either the wasteload or load allocation. However, the TMDL program is not designed to address *contingent* loading and there is nothing in the statute or regulations to account for such loading. Regulating the contingent impacts from the failure of a dam would be as absurd and unfounded as regulating the contingent impacts from an upset, failure, or event of noncompliance at a wastewater treatment plant. We support EPA's approach to the dams as set forth in the draft TMDL.

3. UWAG supports EPA's approach to offsets for new or expanding dischargers.

The availability and legality of "offsets" for new or expanded dischargers has been in contention since the controversial Ninth Circuit Court of Appeals ruling in *Friends of Pinto Creek, et al. v. EPA*, 504 F.3d 1007 (9th Cir. 2007). UWAG believes that *Pinto Creek* was wrongly decided, and we strongly support the use of offsets to account for and manage new or increased loadings of pollutants causing impairment or subject to TMDLs.

The Bay TMDL assumes that the watershed states will accommodate any new or increased loadings of nitrogen, phosphorus, or sediment that do not have a specific allocation in the TMDL with appropriate offsets supported by credible and transparent offset programs subject to EPA and independent oversight. *See* Bay TMDL at S-1. UWAG supports this assumption, and commends EPA for preserving the use of offsets in the TMDL program.

4. UWAG opposes EPA's mandate of reasonable assurance and EPA's threat of backstop allocations for states with insufficient reasonable assurance.

As part of the Bay TMDL proceeding, EPA has demanded that states demonstrate "reasonable assurance" that nonpoint source loading reductions will be achieved. Without such a demonstration, EPA has threatened "to assign all necessary reductions to the point sources." *See* Bay TMDL at 7-2. This threat is born out by the partial and full backstop allocations set forth in the draft TMDL.

> Because of significant deficiencies in plans presented to resolve gaps in authority, staff, funding and accountability systems, and on the basis of the criteria discussed below and EPA's best professional judgment, EPA determined that none of the seven watershed jurisdictions' draft [implementation plans] provided adequate reasonable assurance that programs would be implemented to achieve reduction targets.

Bay TMDL at 8-6.

As a result of these alleged deficiencies, EPA rejected the allocation schemes presented by the states in their watershed implementation plans ("WIPs") and established alternative, more stringent allocation schemes in their place. "Although a number of backstop options existed, EPA primarily relied on decreasing the WLAs to the point sources." Bay TMDL at 8-9. In addition to proposing these more stringent allocations to account for alleged deficiencies in the states' plans, EPA also threatened "full backstop allocations" – specifically reserving the option to apply these allocations "if EPA determines that a jurisdiction's final Phase I WIP is weaker than its draft Phase I WIP and requires additional backstop actions to ensure that point and nonpoint source reductions sufficient to meet WLAs and LAs are achieved and maintained." Bay TMDL at 8-17.

The inherent problem with EPA's approach is that the Agency failed to articulate an objective standard by which to assess "reasonable assurance." Absent such a standard, states cannot meaningfully "shoot for success." Worse, EPA is left with virtually unfettered and subjective discretion to decide "how much is enough."

By way of example, Virginia's point source contribution of TSS is less than 1% of the total loading. Moreover, as EPA acknowledged, Virginia's allocation scheme for achieving EPA's target loads for sediment was 12% better than necessary. However, instead of leaving this aspect of Virginia's WIP in place, EPA proposed an alternative scheme that significantly reduced the allocations assigned to point sources. Since these sources comprise less than 1% of the total loading, the reductions make no appreciable difference on EPA's modeling outputs. In other words, EPA's alternative scheme would force additional reductions from point sources without any corresponding environmental benefits (and without any consideration of the cost or feasibility of the reductions that EPA proposed). Such an outcome should not be allowed to stand, either as a matter of sound science or good public policy.

EPA is correct that the concept of reasonable assurance has been in place for many years, but the fundamental problem with the concept is that it has never officially been defined. More specifically, EPA has never explained how much reasonable assurance is enough, or, alternatively, how much assurance is reasonable. Absent such an explanation, the states in the Bay watershed that are subject to the TMDL have no guideposts by which to measure their nonpoint source reduction strategies.

Consider, for example, a state that provides incentive funding for nonpoint source best management practices through legislative budget allocations that are revisited every 2 years.

Are the reductions from these best management practices "reasonably assured" even though long-term funding for these practices is not guaranteed?[3]

Recognizing the need for a clear answer to these "how much is enough" questions, EPA added a definition of reasonable assurance to its TMDL rule revisions in July 2000. Under that definition, reasonable assurance of nonpoint source reductions hinged on a test that focused, among other factors, on whether the proposed control actions would be "implemented as expeditiously as practicable" and "accomplished through reliable and effective delivery mechanisms."[4]

After more than four years in the making, EPA's 2000 definition of "reasonable assurance" never took effect. Before the final rule was even published in the *Federal Register*, Congress used a spending prohibition to bar EPA from implementing it due to significant concerns about many aspects of the rule. Subsequent lawsuits, review by the National Research Council, and further deliberations by the Agency eventually led to withdrawal of the rule in 2003.

Around this same time, EPA proposed a replacement Watershed Rule.[5] In this replacement rule, EPA abandoned its 2000 definition of reasonable assurance, opting instead for the following:

> EPA is proposing … to require that a jurisdiction submit as part of its TMDL supporting analysis and documentation a demonstration that the

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[3] This precise question was posed by the Virginia Assistant Secretary of Natural Resources to EPA on December 17, 2009, as part of the first Virginia Stakeholder Advisory Group meeting convened to address the forthcoming Bay TMDL. EPA confessed that it had no answer to this question.

[4] "For nonpoint sources … the demonstration of reasonable assurance must show that management measures or other control actions to implement the load allocations contained in each TMDL meet the following four-part test: they specifically apply to the pollutant(s) and the waterbody for which the TMDL is being established; they will be implemented as expeditiously as practicable; they will be accomplished through reliable and effective delivery mechanisms; and they will be supported by adequate water quality funding." 65 Fed. Reg. 43,586, 43,663 (July 13, 2000) (to be codified at 40 C.F.R. §130.2(p)).

[5] EPA released a deliberative draft of this rule on January 10, 2003.

> load allocation is "practicable" (i.e., that it can be accomplished using available and achievable methods).
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> In requiring jurisdictions to submit supporting analysis and documentation that the load allocations are practicable, EPA is intending that jurisdictions would show that they have considered whether the TMDL's load allocation to nonpoint sources is achievable based on currently available information regarding both the ***technical feasibility*** of the practice or management measures but also the ***likelihood that they would be implemented based on economic, social and cultural considerations***."[6]

This renewed focus on practicability (already a component of the existing TMDL rules) marked a dramatic change in EPA's approach to reasonable assurance, which was in part a reaction to the lawsuits over the 2000 rule and in part the result of significant additional outreach to the public between October and December 2001 (EPA hosted five listening sessions around the country during this period).

The Watershed Rule reflects the latest official position taken by EPA on reasonable assurance; but, like the 2000 rule, the Watershed Rule never took effect.[7] As a result, states continue to lack any guideposts from EPA by which to measure their nonpoint source reduction strategies.

If EPA intends to use the threat of backstop allocations in the Bay TMDL to compel states to provide reasonable assurance that their proposed nonpoint source reductions will be achieved, then EPA first must go through a notice-and-comment rulemaking process (as it has attempted twice before) to define how this standard may be met. Unless and until EPA does so, it would be an abuse of authority to impose the partial or full backstop allocations against states for failing to provide reasonable assurance, as EPA has threatened in the draft TMDL.

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[6] Watershed Rule at pp. 90-91 (emphasis added).

[7] In April 2005, EPA officially abandoned this rulemaking.

5. UWAG opposes EPA's mandate of implementation plans.

As a predicate to the release of the draft TMDL, EPA compelled the states to submit WIPs detailing allocation schemes suitable to meet EPA's target loads for nitrogen, phosphorus, and sediment. According to EPA, WIPs "are the first element of a new accountability framework" set forth in Executive Order 13508.[8] The second element is a series of two-year milestones by which states must assess their progress under these plans.[9] WIPs must contain the following eight elements:

- Interim and final nutrient and sediment target loads, subdivided by the pollutant source sector within each of the 92 segments of the watershed;
- Current loading baseline and program capacity assessment (*i.e.*, legal, regulatory, programmatic, financial, staffing, and technical ability to achieve the target loads);
- Accounting for additional loads due to growth;
- Gap analysis of new capacity, additional incentives, new or enhanced regulatory programs, market-based tools, technical and financial assistance, and new legislative authorities needed to achieve the target loads;
- Commitment and strategy to fill gaps;
- Tracking and reporting protocols;
- Contingencies for slow or incomplete implementation; and
- Detailed targets and schedule with rolling two-year milestones.[10]

EPA's expectations regarding WIPs are misplaced for two reasons. First, implementation planning is not part of Section 303(d) of the Clean Water Act or the regulations that implement it. Second, even if it were, meaningful implementation plans cannot be developed until after a TMDL is in place and the reductions set forth in the TMDL are established.

a. *Implementation planning is not part of the federal TMDL program.*

UWAG is aware of, and supports, EPA's long-standing position that TMDLs are not self-implementing. *See*, *e.g.*, EPA's Overview of Impaired Waters and Total Maximum Daily

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[8] November 4, 2009 letter to The Honorable L. Preston Bryant, Jr., Chair of the Chesapeake Bay Program's Principals' Staff Committee, Enclosure B, at p. 13.

[9] *Id.*

[10] *Id.* at pp. 25-30.

Loads Program.[11] For this reason, UWAG appreciates the practical need for implementation planning to achieve the goals of the TMDL process. Some Bay states, like Virginia, already have implementation planning requirements set forth in state law. *See*, *e.g.*, Va. Code 62.1-44.19:7.[12] But EPA lacks any similar authority.

EPA asserts that "Section 117(g) of the Clean Water Act provides a legal framework for ensuring that the signatory jurisdictions develop and begin implementing management plans that achieve the nutrient and sediment loading reductions needed to restore the Bay."[13] But the legislative history of Section 117(g) makes clear that Congress did not provide EPA with any additional regulatory authority to require implementation plans.[14]

By its own admission, EPA also lacks any existing regulatory authority to require implementation plans.[15] EPA attempted to establish such authority in its 2000 TMDL rule revisions. *See* 65 Fed. Reg. at 43,667 (to be codified at 40 C.F.R. §130.32(11)). However, as noted above, those revisions never took effect and were eventually withdrawn.[16]

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[11] Accessible at http://www.epa.gov/OWOW/TMDL/intro.html.

[12] This requirement reads as follows: "The Board shall develop and implement a plan to achieve fully supporting status for impaired waters, except when the impairment is established as naturally occurring. The plan shall include the date of expected achievement of water quality objectives, measurable goals, the corrective actions necessary, and the associated costs, benefits, and environmental impact of addressing impairment and the expeditious development and implementation of total maximum daily loads when appropriate and as required…."

[13] EPA's 202(a) Report at p. 15, *see also* Bay TMDL at 1-12.

[14] "The Committee expects EPA to meet the requirements of this paragraph through the award of implementation grants under subsection (e). Nothing in the Chesapeake Bay Restoration Act provides EPA with any additional regulatory authorities." H. Rept. 550, 106th Cong., 2d Sess., at 3 (2000).

[15] *See* EPA's Overview of Impaired Waters and Total Maximum Daily Loads Program ("Section 303(d) of the CWA does not specifically require implementation plans for TMDLs."). This basic concession is repeated in literally thousands of EPA decision rationales approving state TMDL submittals (for example, see footnote 18 below).

[16] Several industry petitioners, including UWAG, challenged EPA's statutory authority under Section 303(d) of the Clean Water Act to require implementation plans. We argued that EPA

EPA's practice in reviewing and approving or disapproving state TMDLs makes clear that EPA lacks any existing regulatory authority over implementation plans.[17] Whenever a state TMDL includes an implementation planning component, EPA routinely notes in its decision letter that the Agency is not taking any action on that component because it falls outside of the TMDL process.[18]

b. *Even assuming, for the sake of argument, that implementation planning were a part of the federal TMDL program, states cannot be expected to develop implementation plans until after the TMDL is established.*

In the Chesapeake Bay context, EPA has mandated that states submit their WIPs even before EPA released the draft TMDL. This does not make any sense. Even worse, it will have a profound adverse impact on regulated point sources, like electric utilities, who may face premature permitting and business consequences from regulatory actions that are not appropriately informed by the comprehensive and systematic TMDL process.

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misconstrued the language "at a level necessary" in 303(d)(1)(C) to mean "level of regulatory effort" instead of "pollutant level," as clearly contemplated by Congress. We also argued that Congress had already supplied a means for EPA to oversee implementation through section 303(e). We maintained that Congress would not have drawn the requirements of that section so broadly if it had intended the 303(d) TMDL to include implementation requirements. Consistent with those earlier arguments, UWAG continues to dispute EPA's authority now.

[17] *See* EPA's Overview of Impaired Waters and Total Maximum Daily Loads Program ("Although states are not required under section 303(d) to develop TMDL implementation plans, many states include implementation plans with the TMDL or develop them as a separate document. When developed, TMDL implementation plans may provide additional information on what point and nonpoint sources contribute to the impairment and how those sources are being controlled, or should be controlled in the future.").

[18] *See*, *e.g.*, EPA's decision rationale for approving the Tidal Potomac PCB TMDL established by the Interstate Commission on the Potomac River Basin, dated October 31, 2007, at p. 12 ("***Neither the Clean Water Act nor the EPA implementing regulations, guidance or policy requires a TMDL to include an implementation plan. EPA therefore does not approve or disapprove implementation plans as part of the TMDL process.***") (emphasis added).

By definition, until the TMDL is in place and final, states will not know the relative impact of different sources and/or causes of impairment. Nor will they know the specific reductions needed to achieve the loading cap. How can states meaningfully allocate and subdivide loadings among sources when they do not know what those loadings will be or the relative gravity of contributions from different sources?

In prior rulemakings, EPA has grappled with the implementation planning concept. In 2000, for example, EPA added implementation plans as an approvable element of TMDLs. However, as noted above, EPA's 2000 rule revisions never took effect. After abandoning the 2000 rule revisions, EPA embarked on significant additional public outreach. Based on this outreach, EPA concluded that implementation planning is best done ***outside*** of the TMDL process.

> EPA believes that relying on the continuing planning process (CPP) developed pursuant to 303(e) of the CWA, and integrating the watershed approach into on-going State planning processes, can help assure that TMDLs will result in water quality improvements.
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> EPA believes that there are many advantages in providing for implementation planning outside of the TMDL process. First, the CWA authorizes use of the CPP as the mechanism for implementing TMDLs. Section 303(e)(3) requires each State and territory to have an approved CPP that will result in "plans" for all navigable waters in the State.... Moving implementation planning outside of the TMDL approval process may also expedite TMDL review and approval.... Finally, EPA believes that moving implementation planning outside of the TMDL approval process is a more effective way to ensure the development of realistic plans to achieve water quality standards. By allowing a jurisdiction to accomplish implementation planning ***after*** a TMDL has been established or approved, the jurisdiction has a greater opportunity to work with all stakeholders in the watershed to develop a coordinated implementation plan. This greater opportunity for public input in the planning process increases the probability that local controls will actually be adopted and pollutant reductions achieved.[19]

[19] EPA Watershed Rule at pp. 26-29 (emphasis added).

UWAG strongly supports implementation planning under Section 303(e) ***after*** a TMDL is established under Section 303(d). Interestingly, the only Bay state with a detailed implementation planning requirement under state law – Virginia – has consistently interpreted that requirement to apply ***after*** a TMDL is in place. *See*, *e.g.*, Guidance Manual for Total Maximum Daily Load Implementation Plans (July 2003), at p. 1 ("An IP is prepared at some point following development of the TMDL, and approval by EPA."). In fact, none of the 37 implementation plans finalized to date in Virginia arose until ***after*** the underlying TMDLs had been adopted by the State Water Control Board and approved by EPA.

6. EPA lacks authority to compel a schedule for implementation of the TMDL or to threaten consequences against states that fail to meet this schedule.

EPA has unilaterally established a schedule for achieving 60% of the reductions set forth in the Bay TMDL by 2017, and 100% of the reductions by 2025. *See* Bay TMDL Executive Summary at 1. To meet this schedule, EPA has mandated that the states meet recurring two-year milestones to demonstrate their restoration progress or suffer certain EPA-prescribed consequences. *See* Bay TMDL at 1-12 ("The Bay TMDL will be implemented using an accountability framework that includes WIPs, 2-year milestones, EPA's tracking and assessment of restoration progress and, as necessary, specific federal actions if the Bay jurisdictions do not meet their commitments.").

We appreciate that many stakeholders are frustrated by the pace of progress and desire greater urgency and speed in the restoration effort. We believe that the TMDL is an important tool to facilitate restoration. But we caution EPA against infusing the TMDL with more than the statute allows. The problem with EPA's schedule and mandate is that the Agency has no authority to compel them. Nothing in the Clean Water Act or EPA's implementing regulations provides a deadline for TMDL implementation. To the contrary, TMDLs are simply planning tools that help to inform state water quality management decisions. EPA has conceded as much in prior TMDL litigation. *See*, *e.g.*, *Pronsolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002).

We certainly share EPA's interest in restoring the Chesapeake Bay, but EPA cannot impose a schedule for restoration, or threaten consequences against states and dischargers that fail to meet this schedule, without legal authority. EPA lacks that authority here, and must in turn retract both the schedule and the threat of consequences.

7. UWAG questions the achievability of the Bay TMDL.

EPA's draft TMDL imposes severe reductions on regulated point sources. In some cases, the allocations for these sources have been cut by more than 50% when compared to the corresponding state targets for restoring the Bay.[20] In Virginia, EPA assigned sediment allocations using an across-the-board TSS concentration target of 5 mg/l for all industrial and municipal point sources. Even with filtration, this target is unachievable for many industrial facilities and, in any event, is unnecessary to meet EPA's environmental objectives (*see* earlier example on page 5).

UWAG is concerned about the achievability of the allocations set forth in the draft TMDL. UWAG is even more concerned about EPA's apparent failure to consider achievability in setting these allocations.

Over the past decade, there has been growing awareness of the need for assessing achievability as part of (or even before) the TMDL development process. The National Research Council stressed this in its landmark 2001 report, *Assessing the TMDL Approach to Water Quality Management*. The Government Accounting Office did so, as well, in its 2003 report, *Improved EPA Guidance and Support Can Help States Develop Standards That Better Target Cleanup Efforts*. And even EPA has conceded that it needs to do a better job assessing achievability, a concession made in the Agency's 2002 report, *The Twenty Needs Report: How Research Can Improve the TMDL Program*.

Nothing in the current record addresses the achievability of the draft TMDL from a socio-economic perspective. We believe this is a critical shortcoming in the proceeding, and one that needs to be corrected through the use attainability analysis ("UAA") work that EPA initiated but never fully completed.[21] Unless and until EPA assesses and confirms that its proposed TMDL reductions will not cause widespread socio-economic impact, EPA should not finalize the TMDL. If EPA does finalize the TMDL without such an assessment, then its

[20] By way of example, Virginia's target for the Hopewell Regional Waste Treatment Facility was 1,785,125 lbs/yr TN. EPA adjusted this to 609,112 lbs/yr, a 66% reduction. Similarly, Virginia's target for the HRSD-Chesapeake/Elizabeth Waste Treatment facility was 1,074,590 lbs/yr TN. EPA adjusted this to 292,374 lbs/yr, a 73% reduction.

[21] EPA's UAA effort included the development of a scenario to assess and quantify the technical, operational, and economic achievability of the reductions projected by EPA's Bay models. However, without explanation, EPA abandoned this effort in April 2009.

action will trigger the expenditure of public and private resources, as well as permitting and enforcement actions that may prove to be misdirected, unnecessary, or unachievable.

At a minimum, we believe that EPA must amend the record to include a demonstration that the TMDL is in fact achievable. And EPA must then give interested stakeholders, like UWAG, an opportunity to review this record. If aspects of the TMDL are not achievable, then EPA cannot proceed as proposed.

8. UWAG questions the readiness of the models for TMDL development and implementation.

The models underlying the Bay TMDL have been in development for decades. The two major components of EPA's modeling framework are the Phase 5.3 Chesapeake Bay Watershed Model and the Sediment Transport Model. Bay TMDL at 5-15. These models provide EPA with unparalleled scientific understanding of the myriad challenges confronting the Bay watershed. However, these models are nothing more than tools to inform EPA's decisionmaking – tools as susceptible to error as any other. For this reason, EPA has already committed to additional modeling "refinements" in 2011, and possible further modifications to the Phase 5.3 model in 2017. *See, e.g.*, Letter from EPA Region III to the watershed states dated July 1, 2010. EPA has also committed to incorporate any corresponding adjustments to the allocations from these modeling refinements into the next round of state WIPs in 2011. *Id.*

A number of critical modeling errors – both inputs and outputs – have already been identified by the watershed states and stakeholders. These errors include:

- EPA's models have not been fully validated or peer reviewed, and the records of validation and review have not been made available to the public;
- EPA's models were calibrated using data from years with widely varying hydrologic conditions that are not representative of the conditions being projected through the TMDL;
- EPA has not explained, justified or documented the actual uncertainty/error/precision of the models;
- The groundwater inputs to the models are not representative of actual conditions;
- The impact of urban stormwater loads is highly sensitive to EPA's assumptions regarding urban land uses, which have not been validated or subjected to public review; and

- The models are so complex and highly parameterized that it is possible to obtain the "right" answer for the "wrong" reason.

EPA seems inclined to simply "punt" these errors to the modeling refinement process in 2011 (*i.e.*, ***after*** the TMDL has been finalized). UWAG respectfully submits that EPA cannot do so without first assessing whether the modeling errors compromise the integrity of the modeling projections, especially those that will compel regulatory costs and the threat of fines and penalties for regulated point sources. In other words, are the models "good enough" to support allocation decisions that may have an immediate and profound impact on regulated entities? What is the margin of error in EPA's projections? How might that margin influence the discretion permitting authorities have to establish NPDES permit limits and conditions based on EPA's TMDL allocations?

UWAG urges EPA to be transparent in its TMDL decision-making by specifically listing the modeling issues to be addressed, along with their anticipated impacts on the TMDL itself (*e.g.*, on specific wasteload and load allocations, or EPA's assignment of reductions among different sources/sectors). Furthermore, EPA needs to provide additional opportunity for public review and comment on the models, their inputs and outputs, and their effects on the TMDL before making any final TMDL decision. EPA also needs to ensure that permitting, planning, and enforcement decisions are not made based on model projections and TMDL allocations that may change as modeling issues are addressed and resolved.

9. <u>EPA needs to take an even more iterative and less rigid approach to the TMDL</u>.

EPA has signaled its support for adaptive management in the TMDL process, especially with respect to future course corrections in EPA's new "accountability" framework. However, the Agency has not gone far enough to embed adaptive management principles into the TMDL allocations, assumptions, or requirements.

Given the size and complexity of this TMDL, it is vital that EPA acknowledge the inherent limitations in its ability to predict with confidence the reductions that are needed to restore the Bay or the effect of EPA's proposed reductions on our Bay restoration goals. It is equally important that EPA recognize the shared roles and responsibilities of the federal and state government under the Clean Water Act – roles and responsibilities that Congress designed to be cooperative, not coercive.

Rather than fight over issues of precision and authority now – a fight that tends to polarize positions and divide stakeholders who otherwise might agree to work together in a

cooperative manner – EPA should take a phased and adaptive approach, first identifying the immediate, near-term reductions for which there is general consensus, and then projecting future phases based on additional data collection and modeling refinements. Such an approach would allow for reasonable forward progress even in the face of uncertainty, and help to minimize (or narrow) the potential for a fight over EPA's final TMDL decision.

10. Conclusion.

UWAG appreciates the magnitude of the challenge that EPA faces developing a TMDL for a watershed as large and complex as the Chesapeake Bay, and UWAG supports certain elements of EPA's draft TMDL. However, UWAG is concerned that several of EPA's policy predicates exceed the Agency's authority under the Clean Water Act.

In particular, we are concerned that EPA is attempting to use this particular TMDL proceeding to bypass the regulatory process on core issues in the TMDL program – issues that extend beyond the Bay watershed to thousands of other impaired watersheds across the country. If EPA views reasonable assurance and implementation planning as keys to the successful restoration of the Bay, then we encourage EPA to pursue regulatory authority for those tools at the federal level. Toward that end, we recommend that EPA revisit the extensive record already in place for the 2000 and 2003 rulemakings and follow the overwhelming stakeholder sentiment that reasonable assurance should be tied to practicability, and implementation planning should be conducted under Section 303(e) of the Clean Water Act, outside of the TMDL process.

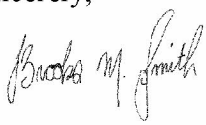
Unless and until EPA meets its rulemaking obligations under the Administrative Procedure Act, EPA cannot lawfully force states to demonstrate reasonable assurance or submit implementation plans, as proposed. Nor can EPA impose consequences on states for failing to meet those requirements, as threatened.

UWAG is committed to working with EPA to establish TMDLs that are scientifically sound, legally defensible, cost effective, and equitable. UWAG also is committed to working with EPA to explore a range of available and appropriate tools for achieving our shared water quality goals in the Chesapeake Bay and around the country.

HUNTON& WILLIAMS

Please feel free to contact me with questions or for more information.

Sincerely,



Brooks M. Smith